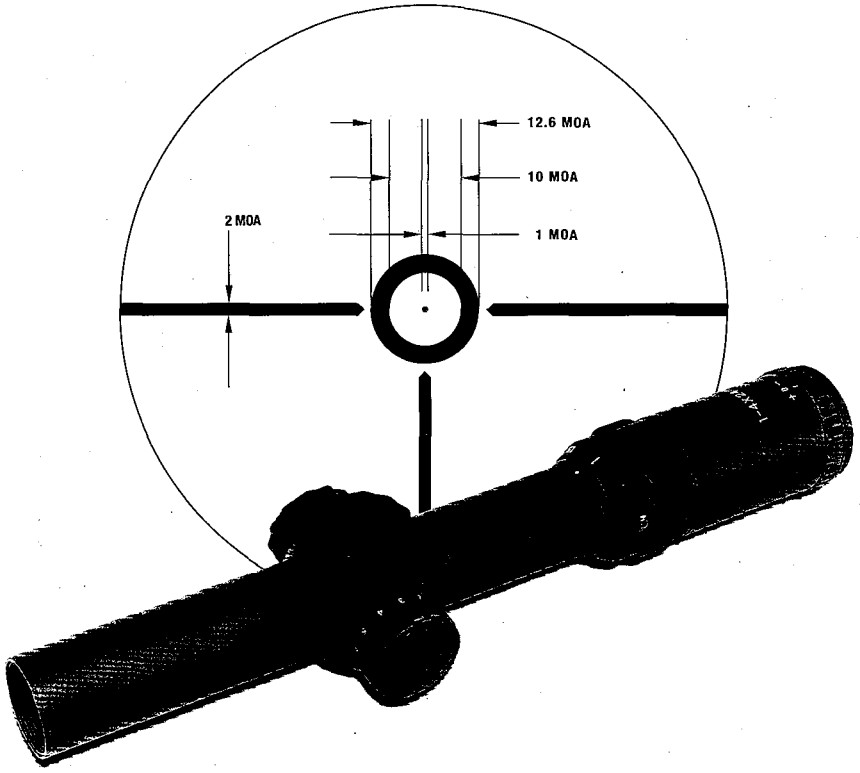
INSTRUCTION & OPERATION

DMS-1

DESIGNATED MARKSMEN SCOPE
TACTICAL RIFLE SCOPE

Installation And Use Of Millett DMS Scope



Before starting, make sure firearm is UNLOADED!!

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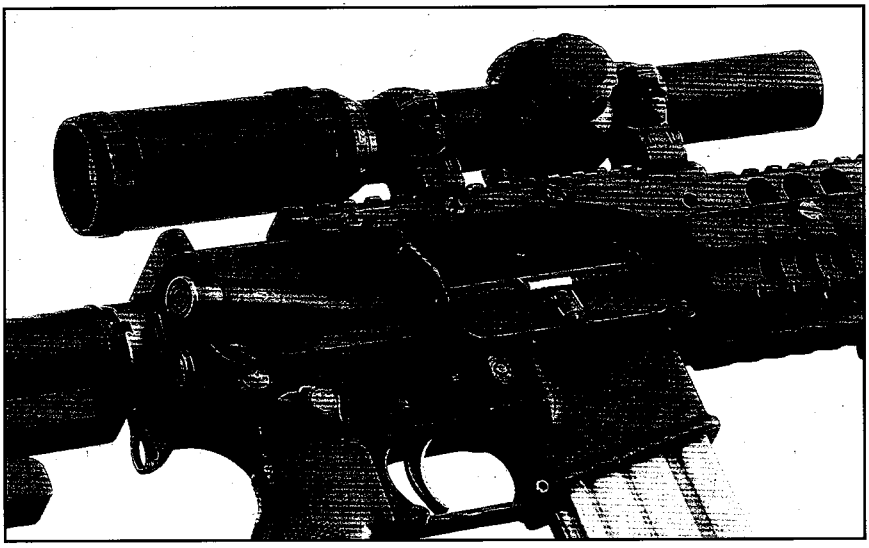


DMS-1 scope mounted on a tactical rifle using Millett GRABBER rings and Picatinny rail.

MOUNTING:

Mounting your scope properly is important to the accuracy and durability of your firearm and scope. Proper mounting assures that the scope is aligned to the barrel and is rigged to the rifle for accuracy. We recommend using the Millett Picatinny rail and Millett Angle-Loc™ rings.

1. Using the base and ring combination that you have chosen, make sure mounting screws for the base are firmly tightened. On most rifles, 50 to 60 inch pounds is suitable for the torque. Loc-tite is recommended to prevent the screws from loosening under recoil. This scope works well on rail-type mounts such as the AR and M16 style rifles.

2. Place the bottoms of the rings onto the base and center and tighten. Make sure ring bottom is aligned in the base and not cocked or out of line with the bore. Failure to align the base and bottom of the rings can damage the scope.

3. Lay the scope into the bottoms of the rings, with the eyepiece to the rear, and align the crosshairs to the vertical and horizontal. Move the scope back and forth to get a full sight picture. While looking through the scope, align the crosshairs and the eye relief. The eye relief on this scope model should be at least 85 mm or 3.5 inches.

4. Place the top caps of the rings on the bottoms and slightly tighten the screws. Check the alignment and eye relief before fully tightening the cap screws.

BORE SIGHTING:

Bore sighting is aligning the scope to the bore of the rifle to assist you in getting on target when sighting the rifle.

There are several ways to bore sight a rifle: 1. Looking through the scope and the bore of the rifle, they are both at the same point. 2. Using an optical device inserted into the bore and aligning the scope to a point on the boresighter. 3. Using a laser inserted into the barrel at the muzzle or chamber to make a reference point and aligning the scope crosshairs to that point. All of these systems work well. Follow the instructions supplied with each method.

SIGHTING IN:

Sighting in your rifle is critical to assure point-of-aim and impact are the same at a known range. The method we recommend is to start shooting at 25 or 50 meters-yards, with a target large enough to allow some room for error. The goal of properly sighting the scope in is to eliminate human error, so use a solid rest to support the rifle. It's best if at the time you sight in, the wind is calm.

1. Fire 3 shots, carefully holding the crosshairs at the same point on the target for each shot.

2. Measure the distance from the point you were aiming at and the center of the 3 shot group. This is how much you will need to move your scope to align the crosshairs. Let's say the group was 4 inches to the right and 5 inches high. Since the adjustment clicks on the DMS-1 scopes are 1/4" or 6 mm at 100, and 1/8" at 50 yards, you will need to move the scope adjustments 32 clicks to the left and 40 down. One full turn of the turret is 72 clicks or 9 inches at 100 yards.

Note: the arrows on the turrets of the scope indicate the direction of movement of the bullet.

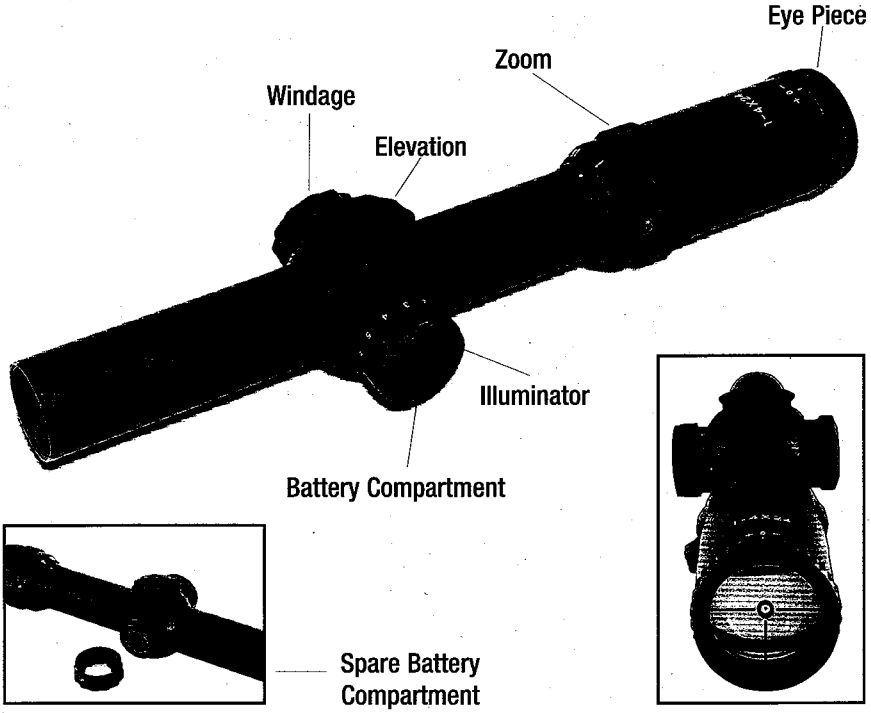
3. Move the target to 100m or yards and repeat the sighting in procedure to adjust the turrets until the scope is aligned to the rifle. Fire a group after adjustment to assure the proper sight in.

4. It is best to fire the rifle at the ranges that the sight will be used to assure your zero and drop for various ranges. Many shooters set the sights a number of inches high at 100 yards so they have a longer point-blank-range. Example: a 308 sighted 2 inches high at 100 will be dead-on at 200 yards, extending the point-blank range to over 300 yards.

5. After zeroing your DMS-1, you can move the ring on top of the windage and elevation adjustment knobs to align the zero with the index mark on the body of the scope as a reference point for your zero. Note the slot on the ring for adjustment of this ring.

USING THE FEATURES OF THE DMS-1 SCOPE:

The DMS was designed to give the shooter the most useful features needed under the most demanding use and conditions. To get the full benefit of the features, it's best to learn their use before needing them. Try the different DMS-1 features before you need them under varying conditions.



1. ILLUMINATION OF THE DONUT-DOT:

On the left side of the scope, there is a small knob that has markings from Off to 10. This is your control for illumination of the DONUT-DOT in low light or when you want a high contrast to the target. Use the lowest setting that still gives good visibility to the target and the DONUT-DOT. The battery life of the illumination is about 50 hours at the highest setting and over 150 for the lowest. Turn the illumination off when not in use. It's best to have a spare battery with you in the field in case a new battery is needed. Under the windage adjustment cover there is a compartment for a spare battery. This battery is held by a rubber material that is required to prevent shorting of the battery.

Note: When the illumination is turned on at night, it can be seen from directly in front of the scope, giving away your position. We recommend using an anti-reflection device in combat situations.

2. FAST EYE FOCUS:

At the rear of the scope, there is an adjustment that is used to focus the crosshairs to your eyes. This is a diopter adjustment and is set from 2 + to – 3.5 diopter. Adjustment is made by rotating the rear ring. Adjust until the DONUT-DOT is sharp to your eyes.

3. ZOOM RING:

On the DMS-1, you have a Zoom Ring that allows you to adjust the magnification of the scope for differing shooting conditions. The scope is variable from 1X to 4X power. It is a true 1X scope, so it can be used with both eyes open by most shooters. 4X is excellent for longer ranges and smaller targets.

If your shooting requires the utmost accuracy, it is best to test fire the scope at various power settings to assure your zero and how the magnification effects your shooting accuracy.

4. "DONUT-DOT" RETICLE:

The Millett DONUT-DOT reticle was designed to aid the shooter in fast target acquisition at close to medium long range (3 yards to 400 yards). As the human eye naturally aligns the highly visible center donut on the target, the ability to get on target quickly and accurately is improved.

If the possibility of a close target exists, it is best to have the scope on 1X as this will allow use with both eyes open and give the widest field of view. For longer ranges and greater accuracy, the power zoom can be turned up to a higher power up to 4X.

As the dot in the center of the DONUT covers only 1 inch at 100 yards when the scope is set at 4X, it can be used as an aiming point at longer ranges and when the most accurate bullet placement is needed. Remember, at longer ranges the dot covers a larger area. Example, at 300 yards the dot covers 3 inches.

The DONUT-DOT reticle is also useful in range finding. The outside ring of the DONUT covers 12.6 inches at 100 yards at 4X, and can be used in comparison of target to the DONUT. Example: A deer is often about 18" from the bottom of the chest to the shoulder. So if you see the deer in the DONUT and it fits about 3 times, you are 300 yards from the deer. As the DONUT-DOT has several measurement that are useful in range finding, it is best to study Chart 1 to learn the different points of measurement.

DMS-1 RETICLE

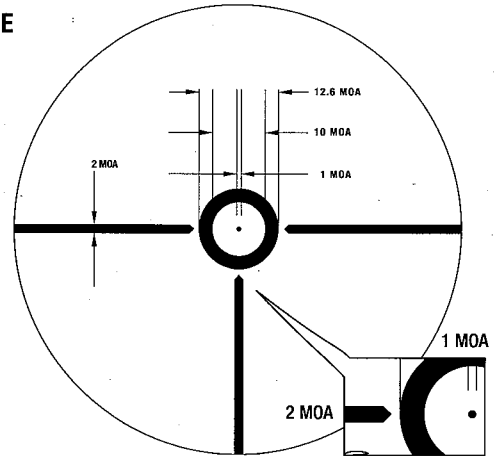


CHART 1	DONUT-DOT VARIABLE SIZE TO RANGE	
	DONUT-DOT Scale	
Power Setting	**Outside of Donut at 100 Yds.**	**Inside of Donut at 100 Yds.**
4X	12.6"	10"
3X	18"	15"
2X	25"	20"
1X	51.6"	43"

CHART 2	DMS-1 SPECIFICATIONS		
Power:	1x to 4x	Length overall Inches:	11.8"
Objective lens:	24mm	Mount length:	6"
Field-of-view ft at 100 Yards:		Weight Oz.:	18
High	23 ft	Range focus:	100 yards
Low	90 ft	Waterproof at 3 ft for 1min	
Exit pupil Dia. mm:		Fog proof:	-20 to 140F
High power:	6mm	Windage and elevation adjustment:	1/2 MOA
Low power:	24mm		
Battery:	CR20032	Range of adjustment:	90 MOA
Eye relief:	3.5"	Lenses: Full Multi-coat all surfaces	
Body Construction: One piece heat-treated aluminum; 30mm tube.			

CARE OF YOUR SCOPE:

Your Millett DMS-1 scope is designed to give many years of service in the most demanding of conditions, but it does require proper care and treatment.

Your scope is waterproof and will not be harmed by rain, snow or dampness, but the electronics for the illumination, if submerged for any length of time in water, may be damaged. It's best to keep the scope as dry as possible and wipe any water off the scope and its lenses. Take care of your scope and it will serve you for a long time.

Keep the lenses clean and only wipe them with proper lens cleaning cloths. If oil or grease get on the lenses, use a photo lens cleaning solution to clean the lenses. Wiping the metal body of the scope with a lightly oiled cloth will protect the finish of the scope. Use scope covers to protect the lenses when not shooting.

Do not turn the turrets beyond the stops, as this will damage the adjustment screws.

If the illumination is intermittent, remove the battery cap and bend the contact fingers inside the cap outward for a better battery connection. It's not advisable to leave the battery in the scope for long periods when not being used as this weakens the contacts and allows the outgassing of the battery to effect the contact.

Your scope is designed to take normal impacts and recoil of rifle use, but if the scope is subject to hard impact, such as being dropped, it's best to test fire to assure it's still zeroed to the point-of-aim.

Never take your scope apart beyond the battery cover. To take the scope apart will void the warranty and allow fogging in some climates. If there is a problem with your scope, return it to Millett for repair.

GUARANTEED:

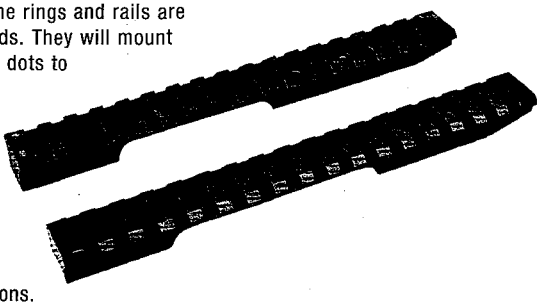
We guarantee that every MILLETT product will be of unsurpassed quality and craftsmanship. If, for any reason, you are not completely satisfied, or if you experience a problem with any of our products, call us at 1-800-MILLETT.

We're here, and ready to help.

Warranty service requires sales receipts.

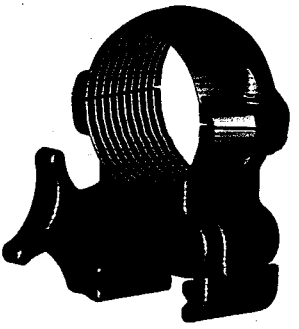
The Holding Power You Need With Millett's New Tactical Rings And Picatinny Rails

Designed to meet the strict requirements of law enforcement, military and others that demand absolute rock-solid scope mounting, Millett's rings and rails meet that demand. Composed of heat-treated aluminum, the rings and rails are machined to the most exacting standards. They will mount a wide range of 30mm optics, from red dots to large target scopes. The rings come in two different heights, medium and high, with the larger ring featuring 6 top cap screws for solid mounting so you don't have to worry about your optics moving from use or recoil. Millett's Picatinny rails are currently available for Remington and Savage rifles, in short and long actions.



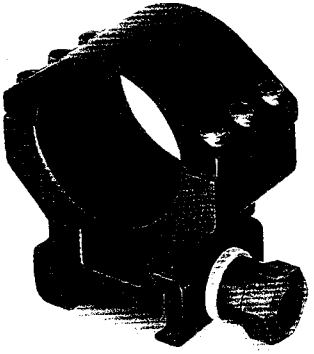
GRABBER™:

The Grabber™, in 1 inch and 30mm, is the answer for quick, easy, repeatable mounting of scopes and other tactical tools such as lights and lasers on Weaver, Picatinny-type rails. Manufactured with heat-treated steel for strength, the Grabber returns to zero every time. A 5 to 1 mechanical advantage locks the Grabber to the rail without cams and weak components. For quick positive mounting, go with the Grabber.



1" GRABBER
GB00001 Smooth Medium
GB00002 Matte Medium
GB00003 Engraved Medium

30mm GRABBER
GB30001 Smooth Medium
GB30002 Matte Medium



TACTICAL RINGS:

Millett Tactical Rings are a light-weight, strong solution for the most demanding uses. 6cap clamping screws positively hold your scope, no matter the level of recoil and the base clamp holds the scope to the base. High and medium heights come in a matte finish. Millett tactical rings are your answer to demanding mount needs.

Millett

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